MAYES TESTING ENGINEERS, INC.

May 6, 2014

Mark Borchardt Anchor Tabs NW 5527 33rd Avenue SE Seattle, WA 98105

Re: Anchor Tab in Slab-on-Metal Deck Load Testing

Mayes Testing Engineers Project Number Q14017

20225 Cedar Valley Road Suite 110 Lynnwood, WA 98036 ph 425.742.9360 fax 425.745.1737

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Dear Mr. Borchardt:

As requested, on April 30, 2014 Mayes Testing Engineers performed load testing of a your Anchor Tab product installed in a slab-on-metal deck mockup delivered to our laboratory in Lynnwood, WA

Background

We understand that the Anchor Tab is a proprietary fall arrest attachment for use during the construction phase of a building. One end of the Anchor Tab is secured to reinforcing steel and cast into a concrete building element. The other end is used as an attachment point to secure a personal fall arrest lifeline.

Per ANSI / WISHA / OSHA standards, we understand that an anchorage used for personal fall arrest must be designed for or demonstrate a minimum ultimate capacity of 5,000 pounds-force (lb-f). In order to demonstrate the capacity of the Anchor Tab, you provided a test specimen consisting of a tab cast into a mockup section of concrete slab-on-metal deck, similar to what is commonly used in steel framed buildings. We understand that the end cast into the slab had a single 2-foot long #4 (1/2-inch diameter) reinforcing bar tied through the tab opening, and that with the exception of the metal deck itself there was no other reinforcement in the mockup deck panel.



Test Procedures

The test load was applied in direct tension to the exposed end of the Anchor Tab via a calibrated hydraulic ram, digital pressure gauge and hand pump. The Anchor Tab was connected to the hydraulic system by a shackle, eye-nut and threaded rod. A reaction beam was used to distribute the load back to the mockup panel and was oriented perpendicular to the #4 bar that was cast-in-place with the Anchor Tab.



Test Results

The Anchor Tab was subjected to a direct tension load of 5,000 lb-f which was maintained for 5-minutes without indication of damage or overstress. The load was then increased to approximatley 8,000 lb-f, at which point deformation / separation of the metal deck was observed, indicating likely damage to the concrete underneath, and the test haulted. Review of the mockup after completion of the testing revealed a significant crack had developed along the bottom and one edge of the specimen.







Crack (red arrows) along bottom and edge

We trust this provides you with the information you require at this time.

Respectfully Submitted,

MAYES TESTING ENGINEERS

Stuart J. Carter, P.E. Special Projects Manager

Michael S. Dolder, P.E. Vice President